

Amendments to the Claims.

This listing replaces all prior versions and listings of the claims in the application.

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Listing of Claims:

1. (currently amended): A spinal and upper cervical impulse treatment device, comprising:

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(a) a stand having a vertically oriented arm ~~an upper end of~~ which is capable of being raised and lowered;

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(b) a horizontally oriented arm coupled to said vertically oriented arm and moveable in an axial direction relative to said vertically oriented arm, rotatable about its own axis, and pivotal about an axis of said vertically oriented arm; and

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(c) ~~an~~ spinal and upper cervical impulse treatment ~~device head~~ coupled to a distal end of said horizontally extending arm and pivotal about an axis through its connection to said horizontally extending arm, said ~~spinal and upper cervical~~ impulse treatment ~~device head~~ having a stylus extending from a lower end thereof and said ~~spinal and upper cervical~~ impulse treatment ~~device head~~ operative to drive

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driving said stylus in both a linear and rotational
direction, and

(d) a display means for inputting stylus alignment information
5 and for displaying when the stylus is aligned with a
patient..

2. (original): A spinal and upper cervical impulse treatment device
according to claim 1, wherein said stylus is collapsible upon
10 meeting resistance of a predetermined force value.

3. (original): A spinal and upper cervical impulse treatment device
according to claim 2, wherein said stylus has an inner sleeve
slidable within an outer sleeve, said inner sleeve held in an
15 extended position relative to said outer sleeve by biased friction
couplings releasable upon application of a threshold force on said
inner sleeve relative to said outer sleeve..

4. (original): A spinal and upper cervical impulse treatment device
20 according to claim 3, wherein said biased friction couplings include
a plurality of ball bearings biased against indents in the wall of
said stylus tube..

5. (currently amended): A spinal and upper cervical impulse
25 treatment device according to claim 1, wherein said display is a

touchscreen mounted on a top of said ~~spinal and upper cervical~~
impulse treatment headdevice.

6. (original): A spinal and upper cervical impulse treatment device
5 according to claim 1, including a microprocessor programmed to
recognize correct alignment and to permit operation to commence only
when proper alignment is achieved.

7. (original): A spinal and upper cervical impulse treatment device
10 according to claim 1, including a linear voice coil actuator mounted
to said stylus and operative to transmit sinusoidal impulse
waveforms along the stylus linear axis.

8. (original): A spinal and upper cervical impulse treatment device
15 according to claim 1, including a second voice coil actuator mounted
to said stylus and operative to transmit rotational sinusoidal
impulse waveforms to said stylus.

9. (currently amended): A spinal and upper cervical impulse
20 treatment device according to claim 1, including an external
computer coupled to said ~~spinal and upper cervical~~ impulse treatment
device, said external computer for entering digitized data points
relating to caliper measurements of aspects of the human body and
transferring these data points from said external computer to said
25 ~~spinal and upper cervical~~ impulse treatment head device.

10. (currently amended): A spinal and upper cervical impulse
treatment device, comprising:

(a) a stand having a vertically oriented arm an upper end of
5 which is capable of being raised and lowered;

(b) a horizontally oriented arm coupled to said vertically
oriented arm and moveable in an axial direction relative to
said vertically oriented arm, rotatable about its own axis,
10 and pivotal about an axis of said vertically oriented arm;
and

(c) ~~an spinal and upper cervical impulse treatment device head~~
and controller coupled to a distal end of said horizontally
15 extending arm and pivotal about an axis through its connection
to said horizontally extending arm, said ~~spinal and upper~~
~~cervical impulse treatment device head~~ having a stylus
extending from a lower end thereof and said ~~spinal and upper~~
~~cervical impulse treatment device head~~ operative to drive said
20 stylus in both a linear and rotational direction, a display
means for inputting stylus alignment information and for
displaying when the stylus is aligned with a patient.

11. (original): A spinal and upper cervical impulse treatment
25 device according to claim 10, wherein said stylus is collapsible
upon meeting resistance of a predetermined force value.

12. (original): A spinal and upper cervical impulse treatment
device according to claim **10**, wherein said stylus has an inner tube
and an outer sleeve, said outer sleeve having a plurality of ball
5 bearings biased against indents in the wall of said inner tube.

13. (currently amended): A spinal and upper cervical impulse
treatment device according to claim **10**, wherein said display means
is a touchscreen mounted on a top of said ~~spinal and upper cervical~~
10 impulse treatment head device.

14. (original): A spinal and upper cervical impulse treatment
device according to claim **10**, including a microprocessor programmed
to recognize correct alignment and to permit operation to commence
15 only when proper alignment is achieved.

15. (currently amended): A spinal and upper cervical impulse
treatment device according to claim **10**, including a linear voice
coil actuator mounted to said stylus and ~~operative to~~ transmitting
20 sinusoidal impulse waveforms along the stylus linear axis.

16. (original): A spinal and upper cervical impulse treatment
device according to claim **10**, including a second voice coil actuator
mounted to said stylus and operative to transmit rotational
25 sinusoidal impulse waveforms to said stylus.

17. (currently amended): A spinal and upper cervical impulse
treatment device according to claim 10, including an external
computer coupled to said spinal an upper cervical impulse treatment
device, said external computer for entering digitized data points
5 relating to caliper measurements of aspects of the human body and
transferring these data points from said external computer to said
~~spinal and upper cervical impulse treatment head device.~~

18. (currently amended): A spinal and upper cervical impulse
10 treatment device, comprising:

(a) ~~an spinal and upper cervical impulse treatment head device~~
having a stylus extending out therefrom, said stylus operative
to receive signals from a controller, mounted on said ~~spinal~~
15 ~~and upper cervical impulse treatment head device,~~
when said stylus is in alignment with a patient causing said
stylus to move both axially and rotationally, and a display on
an exterior surface of said ~~spinal and upper cervical impulse~~
treatment device operative to receive signals from said
20 controller and to display alignment, a transducer coupled to
said stylus operative to impart linear and rotational movement
to said stylus; and

(b) a stand supportable from a support surface and having a
25 coupling end couplable to said impulse controller and

display device with multiple degrees of freedom, enabling said impulse controller and display device to move in multiple directions so as to align said stylus with a patient on a bed proximate said impulse controller and display device.

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19. (new): A spinal and upper cervical impulse treatment device, comprising:

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(a) a moveable base positioned on a fixed support, said moveable base having a horizontally disposed arm moveable up and down vertically, outwardly and inwardly along an axis of said arm and rotationally perpendicular to an axis of said arm, and

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(b) an impulse treatment head coupled to said moveable base, said impulse treatment head having a stylus positionable by said moveable base adjacent a desired treatment location, said impulse treatment head driving said stylus in both a linear and rotational direction.

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20. (new): A spinal and upper cervical impulse treatment device according to claim 19, wherein said display is coupled to said impulse treatment head device and displays stylus alignment information.

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21. (new): A spinal and upper cervical impulse treatment device according to claim 19, wherein said stylus is collapsible upon meeting resistance of a predetermined force value.

5 22. (new): A spinal and upper cervical impulse treatment device according to claim 19, wherein said stylus has an inner sleeve slidable within an outer sleeve, said inner sleeve held in an extended position relative to said outer sleeve by biased friction couplings releasable upon application of a threshold force on said
10 inner sleeve relative to said outer sleeve.

23. (new): A spinal and upper cervical impulse treatment device according to claim 22, wherein said biased friction couplings include a plurality of ball bearings biased against indents in the
15 wall of said stylus tube.

24. (new): A spinal and upper cervical impulse treatment device according to claim 19, wherein said display is a touchscreen mounted on a top of said spinal and upper cervical impulse treatment
20 headdevice.

25. (new): A spinal and upper cervical impulse treatment device according to claim 19, including a microprocessor programmed to recognize correct alignment and to permit operation to commence only
25 when proper alignment is achieved.

26. (new): A spinal and upper cervical impulse treatment device
according to claim 19, including a linear voice coil actuator

26. mounted to said stylus and operative to transmit sinusoidal
5 impulse waveforms along the stylus linear axis.

27. (new): A spinal and upper cervical impulse treatment device,
comprising:

10 (a) a base supported on a fixed support and having a holding
element positionable at any point within a working space, and

(b) an impulse treatment head coupled to and supported by said
holding element, said impulse treatment head positionable
15 adjacent a desired treatment location, said impulse treatment
head transferring energy at a desired location to a body of a
patient, with said transferred energy having both a linear and
rotational direction.

20 28. (new): The spinal and upper cervical impulse treatment device
of claim 27, wherein said impulse treatment head has a stylus which
is positionable adjacent to the desired treatment location.

29. (new): The spinal and upper cervical impulse treatment device
25 of claim 28, wherein the energy transferred is mechanical energy

transferred through vibration of said stylus against the desired
treatment location.

30. (new): The spinal and upper cervical impulse treatment device
5 of claim 29, wherein said base is a stand supported on a floor, said
base having a vertically oriented arm which is capable of being
raised and lowered.

31. (new): The spinal and upper cervical impulse treatment device
10 of claim 30, wherein said holding element is a horizontally
extending arm coupled to said vertically oriented arm, said
horizontally extending arm rotatable about its own axis, and pivotal
about an axis of said vertically oriented arm.

15 32. (new): The spinal and upper cervical impulse treatment device
of claim 31, including a display coupled to said impulse treatment
head for displaying when the stylus is in alignment with a patient
in a treatment position.

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